

CHRISTMAS  
SPECIAL

# the 9th ZX Micro Fair

Official Show Guide

Full details of Exhibitors and Products  
Plan of Exhibition · Discounts · Articles

3rd DECEMBER 10am to 6pm

4th DECEMBER 10:30am to 4:30pm

ALEXANDRA PALACE

LONDON N22

60p





WILL YOU SURVIVE?...

# Christmas at the MICROFAIR

## THE ADVENTURE GAME



Glenn Hunt.

WRITTEN BY PETER SHAW

## CHRISTMAS AT THE MICROFAIR

### adventure program

I've spent quite a lot of time over the past six months investigating ways to write adventure programs, learning how to include graphics, both simple and complex, monsters and objects. The program uses my method of adventure construction, as outlined in my book *'Creating Adventures on your ZX Spectrum'*. The location is the Christmas ZX Microfair. Your aim is to find the ZX Microdrive order form, and escape the fair without being mauled by such awful creatures as the Johnstony, Pimani and the Sinclive. You will find all sorts of things in the show, all of course with tongue firmly in cheek. There is one interesting thing about this program, that is the way the graphics are designed. I only worked this method out while creating this adventure. It is a combination of the usually text adventure and arcade 'monster maze' type graphics. Well I leave you to type in the program. While you type you will probably find a few clues which will help you play.

*Have a good time at the Microfair!*

Peter Shaw



# The Staines & Stanwell Computer Club's stand.

Sorry, all the club members are in session or under the bar. Your exits are north and east.

LOOK OUT, THERE'S A SINCLIVE IN THIS ROOM!  
THE SINCLIVE ATTACKS....

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101REM
Christmas at the Microfair
15 REM ©Peter Shaw 1983
20 GO SUB 870: REM INITIAL
30 POKE 23456,0: LET SC=0: LET CH=0: L
ET P$="": LET Z=2
40 PAUSE 50: CLS
50 GO SUB 1150+(Z*30)
60 IF CH<2 THEN LET CH=0
70 GO SUB 760
80 GO SUB 1560
90 INPUT "WHAT DO YOU WANT TO DO NOW?
"; LINE AS: IF AS="" THEN GO TO 90
100 GO SUB 340
110 FOR A=1 TO LEN AS
120 IF AS(A)="" THEN LET MS=AS: TO A-
1: GO TO 150
130 NEXT A
140 LET MS=AS
150 IF MS="STOP" THEN GO TO 1450
155 IF MS="WAIT" OR MS="PAUSE" THEN BO
RDER 1: PAUSE 0: BORDER 7
156 IF MS="LOOK" THEN PRINT "OK": LET
R(2)=0: GO TO 40
157 IF MS="EXAMINE" THEN PRINT "I SEE
NOTHING SPECIAL": GO TO 40
158 IF MS="SAVE" THEN SAVE "ADVENT" LI
NE 40
159 IF MS="LOAD" THEN LOAD "ADVENT"
160 IF MS="FIGHT" OR MS="KILL" OR MS="S
LAY" OR MS="STAB" THEN GO TO 1740
161 IF MS="DRINK" THEN PRINT "Thisss i
ss good stuff thisss."
162 IF MS="P" OR MS="S" OR MS="D" THEN PR
INT "NAUGHTY, NAUGHTY!" "I SHALL HAVE TO
THROW YOU OUT FOR SAYING THAT!": GO T
O 1450
170 IF LEN MS<10 AND MS<>"" AND MS="INV
ENTORY" (TO LEN MS) THEN GO SUB 580
172 IF MS="HOBBIT" THEN PRINT "DON'T S
WEAR!": GO TO 40
180 IF MS="TAKE" OR MS="GET" OR MS="PIC
K" THEN GO TO 380
181 IF MS="KIP" OR MS="SHOUT" OR MS="CA
LL" OR MS="SLEEP" OR MS="REST" OR MS="SI
T" OR MS="LIE" THEN PRINT "YOU ";MS: GO
TO 40
190 IF MS="DROP" THEN GO SUB 650

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200 IF MS="SCORE" THEN PRINT "YOUR SCO
RE IS ";SCORE
210 IF MS="STRENGTH" THEN PRINT "YOU H
AVE ";STRENGTH;" STRENGTH POINTS"
211 IF LEN MS>5 THEN GO TO 300
220 IF MS="NORTH" (TO LEN MS) AND Z(1
)=0 THEN PRINT "YOU CANNOT GO NORTH"
230 IF MS="NORTH" (TO LEN MS) AND Z(1
)<>0 THEN PRINT "OK": LET Z=Z(1,1): GO
TO 40
240 IF MS="SOUTH" (TO LEN MS) AND Z(2
)=0 THEN PRINT "THERE IS NO EXIT SOUTH"
250 IF MS="SOUTH" (TO LEN MS) AND Z(2
)<>0 THEN PRINT "OK": LET Z=Z(2,2): GO
TO 40
251 IF LEN MS>4 THEN GO TO 300
260 IF MS="EAST" (TO LEN MS) AND Z(3
)=0 THEN PRINT "YOU CAN'T WALK THROUGH W
ALLS"
270 IF MS="EAST" (TO LEN MS) AND Z(3
)<>0 THEN PRINT "OK": LET Z=Z(3,3): GO T
O 40
280 IF MS="WEST" (TO LEN MS) AND Z(4
)=0 THEN PRINT "I SEE NO EXIT WEST"
290 IF MS="WEST" (TO LEN MS) AND Z(4
)<>0 THEN PRINT "OK": LET Z=Z(4,4): GO T
O 40
300 LET Z(5,5)=0
310 IF MS="USE" THEN GO TO 1490
320 IF LEN AS=LEN MS THEN LET AS=AS(A
+1) TO 1: GO TO 110
330 GO TO 90
340 FOR A=1 TO LEN AS
350 IF AS(A)="" THEN LET AS(A)=""
360 NEXT A
370 RETURN
380 IF (O(1,1)<>Z AND (O(2,1)<>Z AND O(3
,1)<>Z AND O(4,1)<>Z AND O(5,1)<>Z) THEN
PRINT "I SEE NOTHING TO TAKE": GO TO 40
390 LET AS=(A+1)
400 FOR A=1 TO LEN AS
410 IF AS(A)="" THEN LET MS=AS: TO A-
1: GO TO 440
420 NEXT A
430 LET MS=AS
440 IF (MS="THE" OR MS="A" OR MS="THAT"
OR MS="UP") AND LEN AS=LEN MS THEN GO
TO 390

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450 IF LEN MS<2 THEN PRINT "DO WHAT ?"
: GO TO 40
460 IF MS(1 TO 2)="BO" AND O(1,1)=Z THE
N PRINT "OK": LET Z(5,5)=0: LET O(1,1)=
0: LET STRENGTH=STRENGTH+50: GO TO 40
470 IF MS(1)="F" AND O(2,1)=Z THEN PRI
NT "SIX TO EIGHT WEEKS DELIVERY, MATE
!": PAUSE 400: GO TO 40
480 IF MS(1)="T" AND O(3,1)=Z THEN PRI
NT "OK": LET Z(2,5)=0: LET O(3,1)=0: GO
TO 40
490 IF MS(1 TO 2)="PI" AND Z(2,6)=1 THE
N GO TO 1760
500 IF (MS(1 TO 2)="JO" OR MS(1 TO 2)="DR
") AND Z(2,6)=2 THEN GO TO 1760
510 IF MS(1 TO 2)="SI" AND Z(2,6)=3 THE
N GO TO 1760
520 IF P$="F" THEN PRINT "FIGHT WHAT?"
: LET P$="": GO TO 40
530 IF MS(1 TO 2)="KE" AND O(4,1)=Z THE
N PRINT "OK": LET Z(2,5)=0: LET O(4,1)=
0: GO TO 40
540 IF MS(1)="M" AND O(5,1)=Z THEN PRI
NT "OK": LET O(5,1)=0: LET Z(2,5)=0: GO
TO 40
550 IF MS(1 TO 2)="KE" AND O(4,1)=0 THE
N PRINT "OK": GO TO 1510
560 IF MS(1)="T" AND O(3,1)=0 THEN PRI
NT "OK": GO TO 1960
570 LET MS="" : GO TO 40
580 FOR A=1 TO 5: IF O(A,1)=0 THEN GO
TO 610
590 NEXT A
600 PRINT "YOU ARE CARRYING NOTHING": R
ETURN
610 PRINT "YOU ARE CARRYING:"
620 FOR A=1 TO 5: IF O(A,1)=0 THEN PRI
NT " ";O(A,1)
625 POKE 234567,-1
630 NEXT A
640 RETURN
650 IF (O(1,1)<>0 AND O(2,1)<>0 AND O(3
,1)<>0 AND O(4,1)<>0 AND O(5,1)<>0) THEN
PRINT "YOU HAVE NOTHING TO DROP": GO TO
40
660 LET AS=AS(A+1)
670 FOR A=1 TO LEN AS
680 IF AS(A)="" THEN LET MS=AS: TO A-
1: GO TO 710
690 NEXT A
700 LET MS=AS
710 IF MS="THE" OR MS="A" OR MS="THAT"
THEN GO TO 660
720 FOR A=1 TO 5: IF MS(1 TO 3)=OS(A,1
) THEN LET O(A,1)=Z: PRINT "OK": GO T
O 40
730 NEXT A
740 PRINT "DROP WHAT?"
750 GO TO 40
760 PRINT : IF Z(2,6)<>0 THEN RETURN
770 FOR A=1 TO 5
780 IF O(A,1)=Z THEN GO TO 820
790 NEXT A
800 IF Z(2,6)<>0 THEN RETURN
810 PRINT "I CAN SEE NOTHING HERE": RET
URN
820 PRINT "I CAN SEE"
830 FOR A=1 TO 5
840 IF O(A,1)=Z THEN PRINT "THE ";OS(A
)
850 NEXT A

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860 RETURN
870 DIM R(9): LET STRENGTH=100: LET SCO
RE=0: DIM Z(9,6): DIM O(5,2): DIM OS(5,2
)
871 BORDER 7: PAPER 7: INK 1
880 FOR A=1 TO 9
890 FOR B=1 TO 9
900: READ Z(A,B): NEXT B
910 NEXT A
920 FOR A=1 TO 5
930: READ OS(A),O(A,1),O(A,2)
940 NEXT A
950 DIM MS(3,10): DIM M(3,2): FOR A=1 T
O 3
960 READ MS(A,1),M(A,2): NEXT A
961 LET F$=CHR$ 70+CHR$ 85+CHR$ 67+CHR$
75
962 LET S$=CHR$ 83+CHR$ 72+CHR$ 73+CHR$
84
963 LET D$=CHR$ 80+CHR$ 73+CHR$ 83+CHR$
83
970 RETURN
980 REM DATA FOLLOWS
990 DATA 0,4,2,0,0,0
1000 DATA 0,0,3,1,0,0
1010 DATA 9,0,0,2,0,1
1020 DATA 1,7,5,0,2,0
1030 DATA 0,0,0,4,0,2
1040 DATA 0,0,0,0,5,0,0
1050 DATA 4,8,0,3,3
1060 DATA 0,0,0,7,4,0
1070 DATA 0,0,0,0,0,0
1080 REM OBJECT DATA FOLLOWS
1090 DATA "BOTTLE",1,0
1100 DATA "FULLER FDS KEYBOARD",4,0
1110 DATA "TAPE",7,0
1120 DATA "KEY",8,5
1130 DATA "MICRODRIVE ORDER FORM",6,0
1140 REM MONSTER DATA
1150 DATA "PINK",3,1
1160 DATA "JOHNSON",5,3
1170 DATA "SINCLIVE",7,1
1180 GO SUB 2000
1185 PRINT "Pink"
1190 PRINT "You can see the members of
the Staines and Stanwell Computer Clu
b laying on the floor with glasses in
these hands. There are exits east and
south."
1200 RETURN
1210 GO SUB 2000
1211 PRINT "The top end of the hall"
1220 PRINT "You are by the Quicksilver a
nd Sinclive hands. There are exits
to east and west."
1230 RETURN
1240 GO SUB 2000
1245 PRINT "The Main Entrance."
1250 PRINT "The exit to the north, b
ut you must not leave until you hav
e completed your task."
1260 RETURN
1270 GO SUB 2000
1275 PRINT "The Automata stand."
1280 PRINT "There are exits north, sout
h and east."
1290 RETURN
1300 GO SUB 2000
1305 PRINT "The dk Tronics building site
."
1310 PRINT "There is a locked door to t

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he east and the only other way out is
west."
1320 RETURN
1330 GO SUB 2000
1334 PRINT "The Programmer's lair."
1340 PRINT "There is not much space in
here, programmers have limited ideas. The
only exit is west."
1350 RETURN
1360 GO SUB 2000
1365 PRINT "The Staines & Stanwell Compu
ter Club's stand."
1370 PRINT "Sorry, all the club members
are in, on or under the bar. Your exi
ts are north and east."
1380 RETURN
1390 GO SUB 2000
1395 PRINT "The 'Pond'"
1400 PRINT "Well, look at all the prett
y boats in the drink! There is anexi
t west."
1410 RETURN
1420 PRINT "This is the Outside World."
1425 POKE 23692,-1
1430 IF 0(5,1)=0 THEN GO TO 1470
1440 PRINT "You have not fulfilled your
purpose. You will have to wait and
ther INT(RND*5)+1 years before your
order form arrives."
1450 PRINT "YOU MANAGED TO SCORE ";SCORE
,"POINTS": INPUT "Another game? (Y/N)";g
$: IF g$="Y" OR G$="YES" THEN RUN
1460 STOP
1470 PRINT "Well done, you have escaped
withorder form. It's a pity you can
't offord them now, isn't it?"
1480 GO TO 1450
1490 IF Z(>5 AND (0(4,1)<>0 OR 0(3,1)<>0
) THEN PRINT "You can't do that!": GO T
O 40
1500 GO TO 390
1510 LET Z(5,3)=6
1520 LET SCORE=SCORE+30
1530 PRINT "The door unlocks and yawns
open."
1540 PRINT "Hurry, it will close if you
are not quick."
1550 GO TO 90
1560 IF Z(Z,6)<>0 THEN GO TO 1580
1570 RETURN
1580 POKE 23692,-1: PRINT "LOOK OUT, THE
RE'S A ";N$(Z(Z,6))
1590 POKE 23692,-1: PRINT "IN THIS ROOM!"
"
1600 PRINT "THE ";N$(Z(Z,6));"ATTACKS...
."
1610 FOR p=1 TO 100: NEXT p
1615 POKE 23692,-1
1620 IF RND*STRENGTH<20 THEN GO TO 1650
1630 PRINT "but you escape his clutches
."
1640 RETURN
1650 PRINT "and he HITS!"
1660 FOR p=1 TO 100: NEXT p
1670 IF RND*STRENGTH<30 THEN GO TO 1710
1680 PRINT "Your weakened, but your stil
l alive."
1690 LET STRENGTH=STRENGTH-INT (RND*30)
1700 RETURN
1710 PRINT "With one fell swoop he cleav
es your skull"
1720 PRINT "You are dead."
1730 GO TO 1440
1740 IF Z(Z,6)=0 THEN PRINT "THERE'S NO
THING HERE TO ";M$: GO TO 40
1750 LET P$="F": GO TO 390
1760 LET P$=""
1770 PRINT "OK": PAUSE 100: CLS
1780 PRINT "YOU ATTACK THE ";N$(Z(Z,6))
1790 FOR P=1 TO 100: NEXT P
1800 IF RND>.6 THEN GO TO 1850
1810 IF 0(1,1)=0 THEN GO TO 1850
1820 PRINT "But you miss"
1830 LET STRENGTH=STRENGTH-INT (RND*20)+
10
1840 GO TO 40
1850 PRINT "AND HIT!!"
1860 LET SCORE=SCORE+5
1870 FOR p=1 TO 100: NEXT p
1880 IF 0(1,1)=0 AND RND*STRENGTH>60 THE
N GO TO 1920
1890 PRINT "but he is still standing."
1900 LET STRENGTH=STRENGTH-INT (RND*20)+
10
1910 GO TO 40
1920 PRINT "You have killed the dreaded"
,"N$(Z(Z,6))
1930 LET Z(Z,6)=0
1940 LET SCORE=SCORE+50
1950 GO TO 40
1960 PRINT "The tape is a copy of 'the
Piman's greatest hits'. The John
stony goes 'round the bend for christma
s' and is admitted tothe Piman's home for
mentally retarded Pac-People."
1970 LET SCORE=SCORE+20
1980 LET 0(3,1)=10: LET M(2,1)=10: LET Z
(Z,5)=0: LET Z(Z,6)=0
1990 PAUSE 500: GO TO 40
2000 REM ROOMS
2010 IF Z(Z,4)=0 THEN GO SUB 2500
2020 IF Z(Z,4)<>0 THEN GO SUB 2600
2030 IF Z(Z,3)=0 THEN GO SUB 2700
2040 IF Z(Z,3)<>0 THEN GO SUB 2800
2050 IF Z(Z,1)=0 THEN GO SUB 2900
2060 IF Z(Z,1)<>0 THEN GO SUB 3000
2070 PRINT AT 12,0;
2080 RETURN
2500 PLOT 0,88: DRAW 49,25
2510 RETURN
2600 PLOT 0,88: DRAW 12,6: DRAW 0,60: DR
AW 26,0: DRAW 0,-46: DRAW 11,4
2605 PLOT 13,112: DRAW 24,0
2610 RETURN
2700 PLOT 255,88: DRAW -49,25
2710 RETURN
2800 PLOT 255,88: DRAW -12,6: DRAW 0,60:
DRAW -26,0: DRAW 0,-46: DRAW -11,4
2805 PLOT 242,112: DRAW -24,0
2810 RETURN
2900 PLOT 49,175: DRAW 0,-63: DRAW 207-4
9,0: DRAW 0,63
2910 RETURN
3000 PLOT 49,175: DRAW 0,-63: DRAW 39,0:
DRAW 0,50: DRAW 81,0: DRAW 0,-50: DRAW
39,0: DRAW 0,63
3010 IF Z(Z(Z,1),1)=0 THEN PLOT 89,133:
DRAW 79,0: RETURN
3020 PLOT 89,133: DRAW 18,0: DRAW 0,162-
133: DRAW 44,0: DRAW 0,-(162-133): DRAW
18,0: PLOT 107,143: DRAW 43,0
3030 RETURN

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# LIST OF STANDS

	FRONT	SINCLAIR RESEARCH	N	7/8	STELL SOFTWARE
	REAR	BRING 'N' BUY	N	9	LCL
A	1-12	ARTIC COMPUTING LTD	O	1-3/12	VORTEX SOFTWARE
AA	2-7	CDS MICROSYSTEMS	O	10/11	BI-PAK SEMICONDUCTORS
AA	9-12	CARNELL SOFTWARE	O	4/5	CP SOFTWARE
B	1-12	QUICKSILVA LTD	O	6	REP PRODUCTS
C	1-12	DK TRONICS LTD	O	7/8	WIDGIT SOFTWARE
D	1-4	INTERFACE PUBNS	O	9	ELEPHANT SOFTWARE
D	11/12	INTERFACE PUBNS	P	1-3/12	SHEPHERD, R SFTWR LTD
D	6-9	INDESCOMP	P	10	TRETOP DESIGNS
E	1-3	GILSOFT	P	11	EXETER SFTWR SUPPS.
E	4/5	MINIATURE TOOL CO	P	11	ACTION GAMES TAPES
E	6-8	SOFT MACHINE	P	4	MACQUILLAN ELCTRNCs
E	9-12	SILVERSOF	P	5	EPRM SERVICES
F	1-3	FOX ELECTRONICS	P	6	SAGA SOFTWARE
F	4	ORWIN SOFTWARE	P	7/8	PHIPPS ASSOCIATES
F	5-7	AGF HARDWARE	Q	1	IMAGE SYSTEMS
F	8	PDQ SOFTWARE	Q	10	SPECTADRAW
F	9-12	COMPUTER BOOKSHOPS	Q	11	AYLESBURY CMPTR CLUB
G	1/2	AUTOMATA LTD	Q	12	MILLFIELD CLUB
G	10	HILTON COMPUTER SVCS	Q	2-7	MICRODEALER UK LTD
G	11/12	R + R SOFTWARE	Q	8	GRAPHID
G	3-6	HEWSON CONSULTANTS	Q	9	JIVE SOFTWARE
G	7/8	CMPTRS OF WIGMORE ST	R	1/2	ARCADE SOFTWARE LTD
G	9	LYDENHURST LTD	R	11/12	AXIS (UK) LTD
H	1/2	FLEXIWORDS CMPTRSHOP	R	3	COMPUTER AGENCIES
H	10/11	MINIATURE TOOL CO	R	4	HIREZZ GAMES
H	12	SPACE AGE SOFTWARE	R	4	DJL SOFTWARE
H	3/4	CRL LTD	R	5/6	CCS LTD
H	5	TAPESOF	R	7-10	ECC PUBLICATIONS
H	6-8	CHEETAH MARKETING	S	1-3/12	FULLER MICRO SYSTEMS
H	9	HILDERBAY LTD	S	10/11	COMPOSOUND
I	1/2	PICTURESQUE	S	4/5	BUFFER MICRO LTD
I	10-12	PRINT 'N' PLOTTER	S	6/7	MC LOTHLORIEN
I	3	AMBA SOFTWARE	S	8	CHIPMUNK SOFTWARE
I	4/5	KEYSOFT	S	9	DIGITAL INTEGRATION
I	6	LEFM	T	1/12	HEINEMANN EDUC BOOKS
I	7/8	RD LABORATORIES LTD	T	2	BIG BROTHER PUBS
I	9	RANDOM RECORDS LTD	T	3	COMPUTERLOCK
J	1/11/12	CRYSTAL COMPUTING	T	4	FAL-SOFT COMPUTERS
J	2-4	BASICARE MICROSYSTEMS	T	5	ROBISOFT SOFTWARE
J	5-10	EAST LONDON ROBOTICS	T	8-11	OXFORD CMPTR PUBLISHING
K	1/12	JRS SOFTWARE LTD	U	1/11/12	RED SHIFT LTD
K	10/11	TOWN NATHAN	U	10	DREAM SOFTWARE
K	2-7	KEMPSTON MICRO ELECT	U	2	SUCCESS SERVICES
K	8	B + R TIDD	U	3	16/48 MAGAZINE
K	9	ADDICTIVE GAMES	U	4/5	BLABY CMPTR GAMES
L	1/2	U-MICROCOMPUTERS LTD	U	6-9	ROBIN HORTON
L	10	BABANI PUBLISHING	V	1/2	TRANSFORM LTD
L	11	FIRMINGER, ALAN	V	10	SAXON COMPUTING
L	12	MICROSPHERE CMPTRS	V	11	SADLERS DEVELOPMENTS
L	3/4	CALPAC	V	12	STEVENAGE CMPTR CLUB
L	5/6	IVYSOFT	V	3/4	CRASH MICRO GAMES
L	7/8	MELBOURNE HOUSE	V	5	CHICHESTER DSNT SFT
L	9	CONTRAST SOFTWARE	V	6-9	MIKROGEN
M	1/11/12	SOFTTEACH LTD	W	1-12	ADD-ON ELECTRONICS
M	2	WATFORD TECH BOOKS	X	1/2/12	COMPUTASOLVE
M	3/4	ANIROG SOFTWARE LTD	X	10	EUROELECTRONICS
M	5	DUCKWORTH	X	11	UK HOME COMPUTERS
M	6	ONE PER CENT SCREENS	X	3	KELWOOD CMPTR CASES
M	7/8	CAMBRIDGE COMPUTING	X	4	STAINES CMPTR CLUB
N	1-3/12	FANTASY SOFTWARE	X	5	CPS LTD
N	10	CAMBRIDGE MICROELECTS	X	6-9	LOGIC SALES LTD
N	11	HAVEN HARDWARE	Y	1/2/3	HISOFT
N	4/5	CAMPBELL SYSTEMS	Z	1-4	SUNSHINE BOOKS
N	6	PROCOM SOFTWARE			

# 9th ZX MICROFAIR

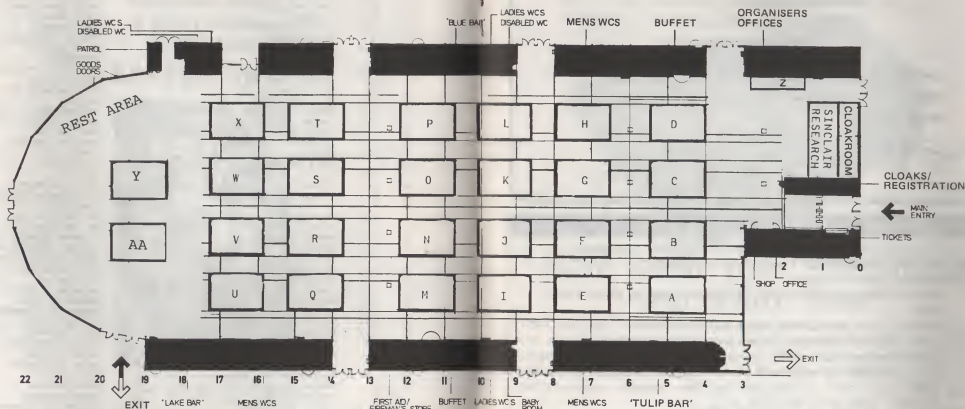


TABLE NUMBERS

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## ALEXANDRA PAVILION ALEXANDRA PALACE

Saturday / Sunday  
December 3-4

## List of Exhibitors



FOX ELECTRONICS LTD - F 1-3

141 ABBEY RD, BASINGSTOKE, HAMPSHIRE

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## Quality ZX SPECTRUM\* Software

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...I haven't seen any other compiler that could match Hisoft's Pascal! ... Using the Turbo Pascal compiler, I was able to produce a program that runs on the Spectrum.

This is a very impressive product. ... of benefits to any Spectrum programmer.

David Bottom ZX COMPUTING Aug/Sep 1983

Just two comments from full length reviews of our powerful and virtually full featured Pascal compiler. The first is a very impressive product. The second is that the compiler is fast, self-documenting, and above all, structured programs and now, with Hisoft Pascal 4T, it is even faster. It is a very powerful and versatile compiler, and it is the only one of its kind. It is a very powerful and versatile compiler, and it is the only one of its kind. It is a very powerful and versatile compiler, and it is the only one of its kind.

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DEV PAC is most highly recommended. The documentation is first class. Your Computer May 1983

...in machine code, but DEV PAC - it is the best currently on the market. Adam Dunning, ZX SOFT in Which Micro September 1983

Two comments from reviews of earlier versions of DEV PAC - now we have DEV PAC 3. It is a very powerful and versatile compiler, and it is the only one of its kind. It is a very powerful and versatile compiler, and it is the only one of its kind. It is a very powerful and versatile compiler, and it is the only one of its kind.

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# The Spectrum Network

A few thoughts by Dr. Ian Logan

In comparison with other microcomputer networks currently available, the Spectrum network is very much cheaper and easier to use. It requires only the fitting of a ZX Interface 1 to an otherwise ordinary Spectrum to make a functioning network station. This station can then be joined to other stations by suitable wires. It is not necessary to have any Microdrives — but who would want to be without one of these! In most cases just two Spectrums would be linked — making a two station network, but it is possible to join up to 64 Spectrums together at one time.

At the moment it is the huge number of excellent games that has made the Spectrum such a success, and there is no doubt it is the games market that will make most use of the Spectrum network. Although, there are other uses to which the network can be put.

To the games-programmer the advent of the Spectrum network offers a new and exciting dimension that has yet to be explored. Up until now it has not been possible to write games that have been fully interactive between the microcomputer and two or more players. The use of a 'port' of the keyboard, a joystick for each player, or just simply taking turns, is very limiting. But, networking allows each player the use of a whole keyboard as well as making available a set of microcomputers to share in the execution of the program.

As examples, consider the following ideas:

Adventure games (— super Hobbits?), where the computer as now provides the environment; and the players, two or more, are all able to individually enter text from their own keyboards. And, as the game progresses the actions of one player may hinder or enhance the advance of another — in a truly competitive manner.

Action games (— super Manic Miner?), where instead of the familiar crowd of players awaiting their turns each player has a network station. And, because of the network, each competitor can be told just how they are doing as compared to the other players — perhaps the game could include 'handicapping' to give a fairer chance of winning!

Serious games (— as if the others are not!), such as chess could be programmed with parallel-computing ideas in a much easier manner that would be possible with a true parallel-processor computer. I feel that the expert programmer might find this particular field challenging.

**Group ideas:**

The use of a Spectrum network by a group of friends or a class allows for the members to pass amongst themselves programs and data in a very easy manner. The network can allow for all the members of a group to access particular sets of data — on a Microdrive attached to one station, and to use a communal ZX or RS232 printer. In a classroom it is also possible to start the lesson with the distribution of 'last time's work', and to end the lesson with the collecting of all the pupils results. This is likely to prove very useful.

**Conclusion:**

The Spectrum network is the first of the many cheap microcomputer networks that will appear over the next few years. And, for many people it will be with a Spectrum network that they get their introduction to the field of networking. The Spectrum network is an exciting development and we are all able to share in its promising future — whether we are games-programmers, games-players or more serious Spectrum users.